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APPLICATION N	Ю.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,628		03/22/2004	Tsung Yen Tsai	CP4004-AMP06571	1467
46704	7590	04/18/2006	,	EXAM	INER
TSUNG	YEN TSA	J	JIANG, CHEN WEN		
235 CHU TAIPEI F	NG-HO BO	OX 8-24	ART UNIT	PAPER NUMBER	
TAIWAN	,		3744		
				DATE MAILED: 04/18/200	6

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/805,628	TSAI, TSUNG YEN
Office Action Summary	Examiner	Art Unit
	Chen-Wen Jiang	3744
The MAILING DATE of this communication Period for Reply	appears on the cover sheet w	ith the correspondence address
A SHORTENED STATUTORY PERIOD FOR RE WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFI after SIX (6) MONTHS from the mailing date of this communication  - If NO period for reply is specified above, the maximum statutory pe  - Failure to reply within the set or extended period for reply will, by st Any reply received by the Office later than three months after the meanned patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THIS COMMUNIO R 1.136(a). In no event, however, may a r riod will apply and will expire SIX (6) MON atute, cause the application to become AB	CATION. reply be timely filed ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).
Status		
1)⊠ Responsive to communication(s) filed on 2	2 March 2004.	
	This action is non-final.	
Since this application is in condition for allocation accordance with the practice und	wance except for formal matt	•
Disposition of Claims		
4) ⊠ Claim(s) 1-5 is/are pending in the application 4a) Of the above claim(s) is/are with 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-5 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction are	drawn from consideration.	
Application Papers		
9) The specification is objected to by the Exan	niner.	
10)⊠ The drawing(s) filed on <u>22 March 2004</u> is/ar	re: a)⊠ accepted or b)⊡ obj	ected to by the Examiner.
Applicant may not request that any objection to	the drawing(s) be held in abeyar	nce. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the control of the oath or declaration is objected to by the	•	
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of:  1. Certified copies of the priority docum 2. Certified copies of the priority docum 3. Copies of the certified copies of the papplication from the International Bu * See the attached detailed Office action for a	nents have been received. Hents have been received in A Poriority documents have been Freau (PCT Rule 17.2(a)).	pplication No received in this National Stage
Attachment(s)		
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SE Paper No(s)/Mail Date</li> </ol>	Paper No(	Summary (PTO-413) s)/Mail Date nformal Patent Application (PTO-152)

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 2. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kang (U.S. Patent Number 5,848,282) in view of Cheng et al. (U.S. Patent Number 6,935,130) or Nosaka (JP 61055750).

Kang discloses a cooling fan controlling device for a computer system. Referring to Figs.4 and 6, the device comprises a computer system with power supply 10, power management system 12, delay switch 80 and fan 20. When the computer system is in a suspend mode, the control proceeds to step S400, wherein driving signal fds2 is generated from mode detector 60 and delayed for the constant time by delay circuit 80. During the constant time, delayed signal fds2 is provided to fan driver 70 and the cooling fan 20 is rotated at low speed, but, after the constant time, delayed signal fds2 is provided to fan driver 70 for a predetermined time and the

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control proceeds to step S420. At step S420, after the predetermined time, mode detector 60 does not generate driving signal fds2. As a result, cooling fan 20 is halted. Kang discloses the invention substantially as claimed. However, Kang does not disclose multiple fans in the computer. Cheng et al. and Nosaka disclose multiple fans in the same field of endeavor for the purpose of cooling several heat generating parts. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus of Kang with multiple fans in view of Cheng et al. and Nosaka so as to cool different computer parts.

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kang/Cheng/Nosaka as applied to claim 1 above, and further in view of Hiroi (JP 11023658).

Kang/Cheng/Nosaka discloses the invention substantially as claimed. However, Kang/Cheng/Nosaka does not disclose sensor on heat generating part to control fan speed. Hiroi discloses fan speed is controlled by the temperature of the heat generating element in the same field of endeavor for the purpose of cooling control. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus of Kang/Cheng/Nosaka with a fan control in view of Hiroi so as to improve the cooling. Additionally, inasmuch as the references disclose temperature sensor as art recognized equivalents, it would have been obvious to one of ordinary skill in the exercise art to substitute one for other. In re Fout, 675 F.2d 297, 301, 213 USPQ 532, 536 (CCPA 1982).

4. Claims 1,2,3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiu et al. (TW 392106) in view of Cheng et al. (U.S. Patent Number 6,935,130) or Nosaka (JP 61055750).

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Shiu et al. disclose a delay switch device for cooling fan on computer system. The power supply, CPU and other heat generating parts are inherent in the computer system. When the CPU of the computer is turned off, the delay switch can keep the cooling fan running for a period of time at slow speed to facilitate heat dissipation. The delay time can be adjusted through the resistor and capacitor. Fig.3 presents the adjustable time delay switch and Fig.4 presents the temperature controlled delay switch. However, Shiu et al. do not disclose multiple fans in the computer. Cheng et al. and Nosaka disclose multiple fans in the same field of endeavor for the purpose of cooling several heat generating parts. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus of Shiu et al. with multiple fans in view of Cheng et al. and Nosaka so as to cool different computer parts.

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5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shiu et al./Cheng/Nosaka as applied to claim 1 above, and further in view of Chang (U.S. Patent Number 6,388,878) or Su (U.S. Patent Number 6,643,126).

Chang and Su disclose the fan display function for the cooling of the computer.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus of Shiu et al./Cheng/Nosaka with fan display in view of Chang or Su so as to display the fan function.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chen-Wen Jiang whose telephone number is (571) 272-4809. The examiner can normally be reached on Monday-Thursday from 8:00 to 6:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chen-Wen Jiang

